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20 years of Solutions 1988-2008

12075 North Corporate Parkway
Suite 210
Mequon WI 53092
(262) 241-3133
(800) 776-7140
Fax (262) 241-8222
www.northernenvironmental.com

May 15, 2008
(TWA 01-2200-2570)

Mr. Lawrence Lester
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Madison, WI 53711

RE: Groundwater Remediation and Sampling Progress Report, September 22, 2006 through March 24, 2008; 3868 East Washington Avenue, Madison, Wisconsin; BRRTS #03-13-170385, COMM #53704-3600-68-A

Dear Mr. Lester:

This letter summarizes the corrective action process, system performance, and groundwater monitoring results from September 22, 2006 through March 24, 2008 (the Reporting Period) at 3868 East Washington Avenue (the Property). The Wisconsin Department of Natural Resources (WDNR) Form 4400-194, "Operation, Maintenance, Monitoring and Optimization of Soil and Groundwater Remediation Systems" is enclosed as Attachment A.

BACKGROUND INFORMATION

Two 1000-gallon underground storage tanks (USTs) were reportedly removed from the Property during 1977. Released petroleum was detected at the Property during a 1997 Phase II environmental site assessment. During July 1997, petroleum-contaminated soil was encountered during development activities, and Applied Environmental Sciences (AES) coordinated the excavation of approximately 150 tons of petroleum-contaminated soil from the Property. A site investigation, including the installation of at least 21 boreholes and 15 groundwater monitoring wells was completed by AES and Ayres Associates (Ayres) between 1997 and 2001. Based on the results of the site investigation, petroleum-contaminated groundwater was present in unconsolidated soil and bedrock at the Property and the adjacent property to the north. Sandstone bedrock was encountered at approximately 107 feet below grade. The city of Madison (the City) public water supply well #15 is located approximately 300 feet north and downgradient of the Property. The site layout is shown in Figure 1. Ayres summarized the site investigation in a September 2001 report (Ayres, 2001) and recommended active remediation of petroleum-contaminated soil and groundwater.

During May 2002, the Wisconsin Department of Commerce (COMM) included the Property in the Round 20 public bid process (COMM, 2002a). The bid scope included active remediation of petroleum-contaminated soil and groundwater at the Property. Northern Environmental was retained during August 2002 to complete the scope of the COMM bid (COMM, 2002b).

Between 2003 and 2005, Northern Environmental Technologies, Incorporated (Northern Environmental) installed a soil vapor extraction (SVE) remediation system and a groundwater extraction system to remediate contaminated soil and groundwater at the Property. The SVE system consists of four SVE wells with one emission point housed in an 8- by 10-foot steel-framed building (treatment shed). Per the requirements of section NR 419.07, Wisconsin Administrative Code, Northern Environmental notified the WDNR of the intent to operate the SVE system at the Site (Mentzer, 2004). The groundwater remediation system (the System) consists of four groundwater extraction wells placed along the center axis of the contaminated groundwater

plume. Groundwater from the extraction wells was pumped to the treatment shed, treated via aeration and carbon filtering until August 24, 2005, and discharged to a City storm sewer. Before system operation, Northern Environmental obtained a Wisconsin Pollution Discharge Elimination System (WDPES) permit from the WDNR that authorized the discharge of treated groundwater to the City storm sewer (Liska, 2005).

The SVE system operated for approximately 11 months between December 2004 and June 2006. A total of 37.6 pounds of petroleum volatile organic compounds (PVOCs) was removed by the SVE system. Since concentrations of PVOCs in air samples collected from the SVE system were extremely low (i.e., less than 20 micrograms per liter [μg/l]), system operation was discontinued during June 2006.

The System began operating on August 24, 2005. The hardness of groundwater caused frequent clogging of the carbon filter. Therefore, Northern Environmental requested removal of the carbon filter from the system during July 2006. On August 8, 2006, Mr. Robert Liska of the WDNR approved the removal of carbon filtering (Liska, 2006). On August 9, 2006 the carbon filter was removed from the system. Northern Environmental submitted a letter report to the WDNR on January 11, 2007 summarizing the groundwater remediation and monitoring activities through September 2006 (Northern Environmental, 2007). This letter summarizes the corrective action process, system performance, and groundwater monitoring results.

SUMMARY OF SYSTEM OPERATION AND RESULTS

Groundwater Extraction System Operation and Maintenance

The System operated for approximately 368 of the 550 days during the Reporting Period. During operation, the system pumped groundwater from the four groundwater recovery wells (RW1 through RW4). The System did not operate for portions of December 2006 and January 2007 because the System blower malfunctioned and had to be replaced. Additional maintenance and repairs required during the Reporting Period caused the System to be shut down for periods of time. During February 2007, Northern Environmental discontinued use of the effluent water flow meter since the meter frequently clogged from hard water deposits. An hour meter was placed on the effluent pump to track groundwater extraction rates and volumes. Since the effluent pump is set to pump water at a fixed rate, the pumping rate can be accurately determined by multiplying the hours the pump operated by the fixed pumping rate.

Removal of carbon filtering from the System dramatically improved pumping rates. The overall System pumping rate (including down time for System repairs) was approximately 6.1 gallons per minute (8775 gallons per day) during the Reporting Period and a total of 4,826,208 gallons of groundwater were pumped and treated. Since the system began operation, approximately 5,153,874 gallons of groundwater has been pumped and treated. The groundwater extraction totals are summarized in Table 1.

Groundwater samples were collected directly from the extraction wells during March 2008 and laboratory analyzed for PVOCs to determine contaminant concentrations after operating the System for over 2.5 years. Only extraction well RW3 contains PVOC concentrations exceeding the Chapter NR 140 Wisconsin Administrative Code (NR 140, Wis. Adm. Code) enforcement standard (ES). Extraction well sample results are included in Table 2. Analytical laboratory analysis reports are included in Attachment B.

Water samples were collected from the system discharge at times and for parameters specified in the WPDES permit. Northern Environmental completed the WDNR "Discharge Monitoring Report Forms" and submitted them to the WDNR periodically. Copies of the forms are included in Attachment C.

Water Table Elevation

Groundwater elevations were measured periodically in monitoring wells to evaluate the groundwater flow direction. Groundwater elevation data are tabulated in Table 3. Water table conditions while the System was in

operation on October 5, 2007 are depicted in Figure 2. The potentiometric surface map of wells screened in the lower portions of the unconsolidated aquifer is illustrated in Figure 3.

Historically, natural shallow water table groundwater flow is to the north. During System operation, groundwater in the shallow aquifer flows towards the extraction wells with the greatest depression around RW3 and RW4 (Figure 2). Groundwater in monitoring wells screened in the lower portions of the unconsolidated aquifer also flows to the north (Figure 3). A small cone of depression exists surrounding RW2, RW3, and RW4. The limited number of water table monitoring wells and piezometers prevents a more detailed evaluation of the cone of depression created by the System.

Monitoring Well Sampling

Groundwater samples were collected on May 23 and October 5 2007, and March 25, 2008 from monitoring wells MW-1, MW-4, MW-5, MW-6, PZ-1A, PZ-4A, PZ-5A, PZ-5B, PZ-6A, and PZ-6B. In addition, monitoring wells MW-2, MW-3, MW-7, and PZ-1B were sampled on March 25, 2008 and laboratory analyzed for PVOCs and/or 1,2-dichloroethane. Groundwater samples were collected to determine trends in groundwater quality and to assess remediation system performance. Groundwater quality results are summarized in Table 2.

Distribution of PVOCs

Quarterly groundwater monitoring results of selected wells were used to determine plume characteristics and contaminant concentration trends. Overall, petroleum concentrations generally remained stable between September 2006 and October 2007. The March 2008 groundwater sampling data showed significant contaminant concentration reductions in MW-1, MW-4, PZ-1A, PZ-5A, and PZ-6A. The reductions may be due to higher System pumping rates. However, PVOC concentrations remain above the NR 140, Wis. Adm. Code ES within the contaminant plume.

The groundwater quality results of samples collected in downgradient well (PZ-6A) during 2006 and 2007 suggested that the contaminant plume may have been migrating to the north within the lower portions of the unconsolidated aquifer. However, PVOC concentrations in PZ-6A decreased significantly during March 2008 and are now below the NR 140 Wis. Adm. Code ES. The increased System pumping rate has likely reduced the extent of the groundwater contaminant plume.

In addition, downgradient bedrock well PZ-6B has not contained detectable concentrations of PVOCs during the last two sampling events. Therefore, the contaminant plume does not appear to be migrating in the shallow portions of the aquifer or the bedrock aquifer. The extent of petroleum-contaminated groundwater in the shallow and deeper portions of the unconsolidated aquifer is shown on Figures 2 and 3, respectively.

CONCLUSIONS AND RECOMMENDATIONS

The SVE system operated for approximately 11 months. At the end of operation, total PVOC concentrations in soil vapor removed by the SVE system declined to less than 20 μg/l. The SVE system reached its limit of effectiveness and operation of the system was discontinued during June 2006.

Over 5 million gallons of petroleum-contaminated groundwater has been pumped from four extraction wells since the System began operating. Groundwater samples collected from the extraction wells show significantly contaminated groundwater is no longer entering the extraction wells. Therefore, the System, as currently constructed, appears to have reached its limit of effectiveness in reducing contaminant concentrations. However, the System appears to be preventing the migration of petroleum contamination to the north towards the City municipal well. System operation was discontinued during March 2008.

Although contaminant levels have declined in some monitoring wells, petroleum-contaminated groundwater remains in both the shallow and deep portions of the unconsolidated aquifer. The groundwater extraction wells do not appear to be hydraulically connected to some groundwater monitoring wells (especially shallow groundwater) as the site investigation data indicated. The relatively low permeability of unconsolidated saturated soil and discontinuous layers of dense silt or silty sand may be preventing contaminated groundwater from migrating to the extraction wells. In addition, the effects of groundwater pumping may have created preferential pathways of groundwater flow. As a result, the remedial objectives set forth by the COMM Bid can not be met with the remediation plan. Additional groundwater extraction wells would be required for continued System operation to be effective.

Since elevated petroleum contamination remains in groundwater, natural attenuation is not a viable remedial alternative at this time. Instead, on-going system operation and installation of additional groundwater extraction wells to better capture both the shallow and deep unconsolidated aquifers are needed.

We trust this information meets your needs. Please call us if you have any questions or comments.

Sincerely,
Northern Environmental Technologies, Incorporated

Christopher C. Hatfield, PG
Registered Geologist

Stuart J. Gross, PG
District Director

CCH/lmh
Attachments

c: Kevin Lederer, Capitol Britton Station LLC

REFERENCES

Ayres Associates, "Contamination Assessment Report, 3868 East Washington Avenue, LLC," September 5, 2001.

Liska, Robert J. (Wisconsin Department of Natural Resources) letter to Kevin Lederer (Capitol Britton Station, LLC), January 28, 2005.

Liska, Robert J. (Wisconsin Department of Natural Resources), email to Chris Hatfield (Northern Environmental Technologies, Incorporated), August 8, 2006.

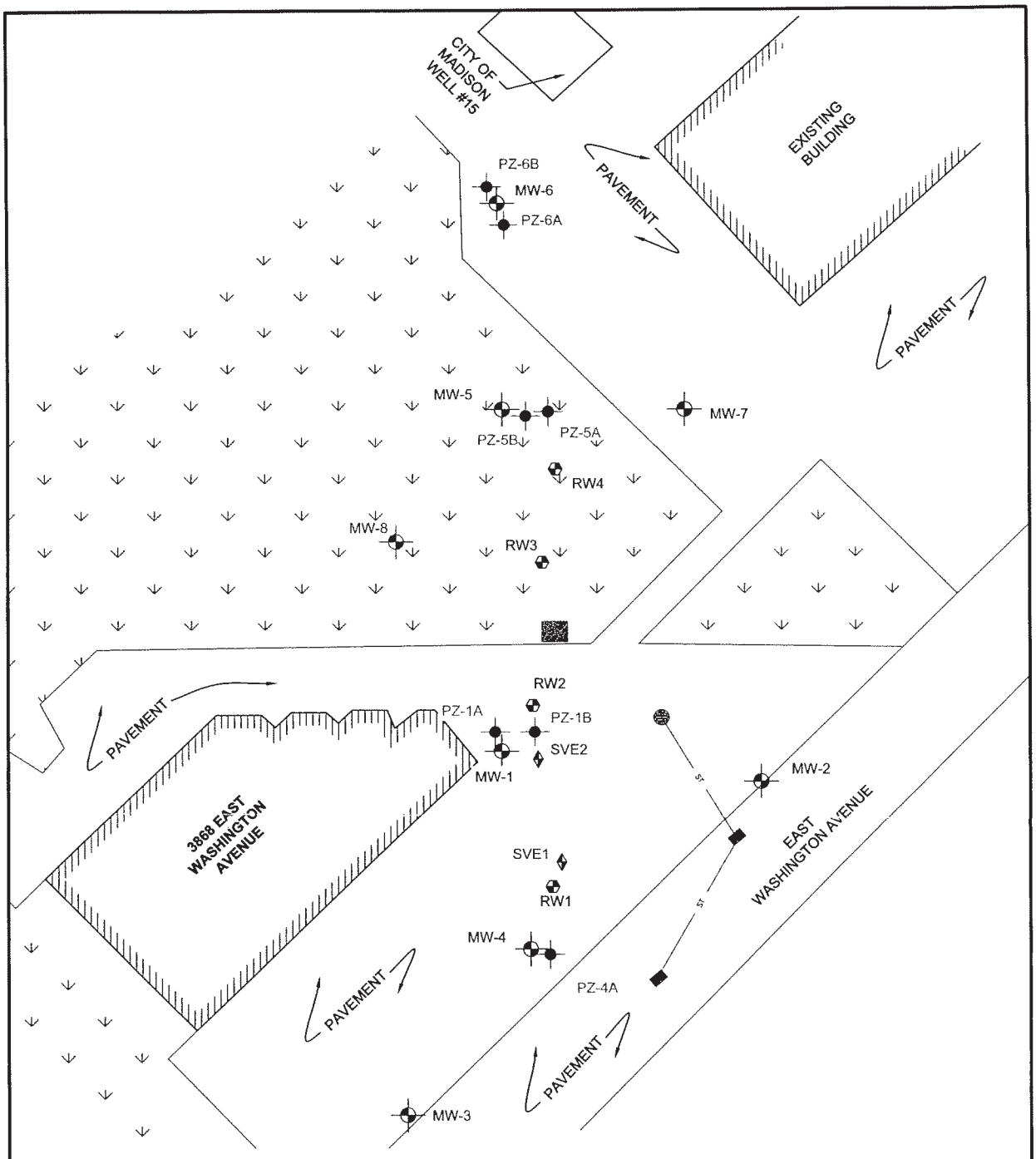
Mentzer, Joseph E. (Northern Environmental Technologies, Incorporated), letter to Larry Lester (Wisconsin Department of Natural Resources), November 16, 2004.

Northern Environmental Technologies, Incorporated, "Groundwater Remediation and Sampling Progress Report, January 1, 2005 through September 21, 2006; 3868 East Washington Avenue, Madison, Wisconsin", January 11, 2007.

Wisconsin Department of Commerce, "Public Bid Request – Round 20, 3868 East Washington Ave, LLC", May 28, 2002(a).

Wisconsin Department of Commerce, letter to Scott Tebon (3868 East Washington Avenue, LLC), August 19, 2002(b).

Wisconsin Department of Natural Resources, "Groundwater Quality," *Wisconsin Administrative Code,* Chapter NR 140, January 2008



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Hydrologists • Engineers • Surveyors • Scientists
12075 North Corporate Parkway, Suite 210, Mequon, Wisconsin 53092
Phone: 800-776-7140 Fax: 262-241-8222
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SITE LAYOUT

3868 EAST WASHINGTON AVENUE
MADISON, WISCONSIN

DATE: 04/09/08	DRAWN BY: BMP	TASK NUMBER: 2	PROJECT NUMBER: TWA 01-2200-2570	FIGURE 1

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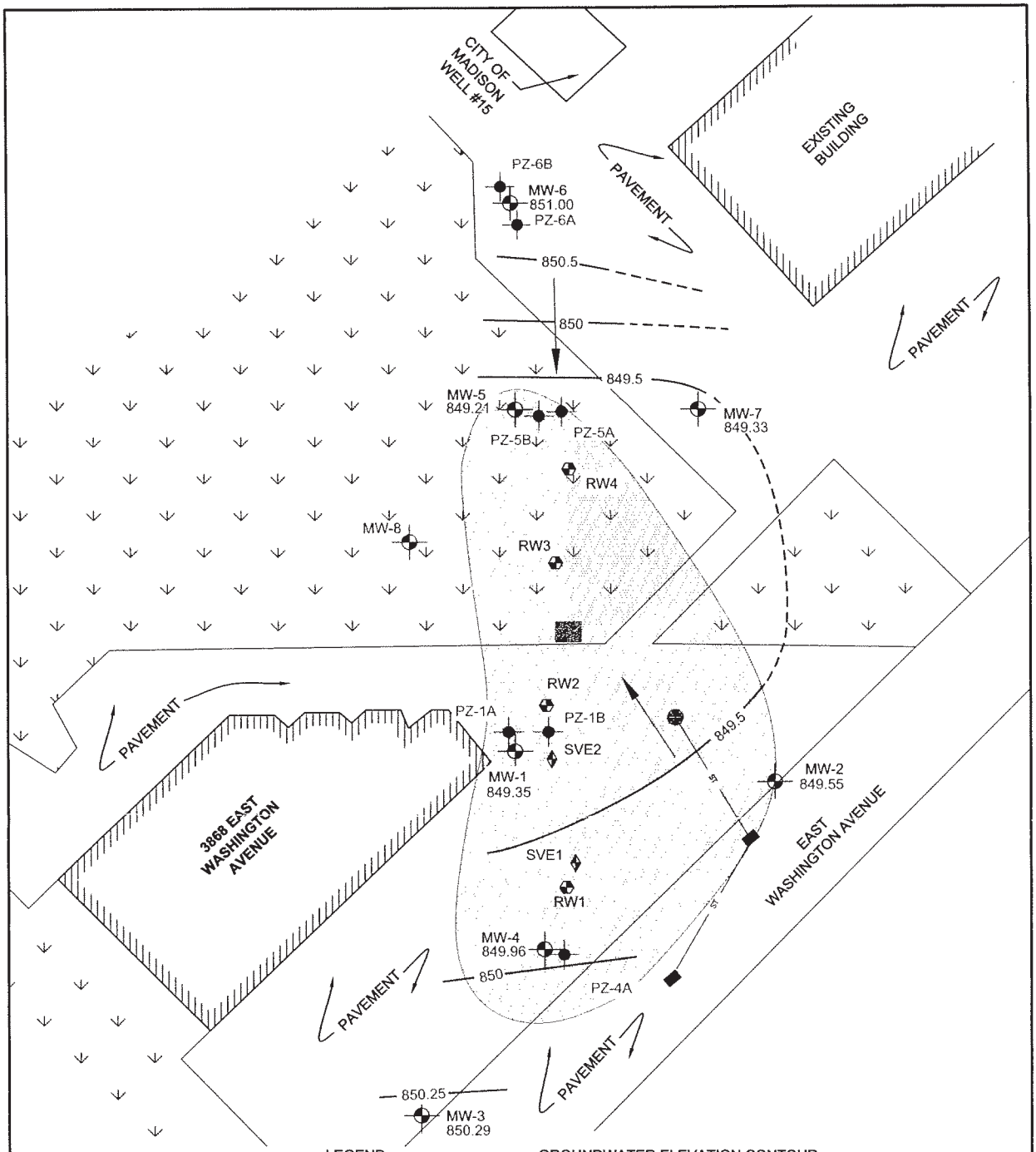

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GROUNDWATER ELEVATION OCTOBER 5, 2007

CAPITOL BRITTON STATION, LLC
3868 EAST WASHINGTON AVENUE
MADISON, WISCONSIN

DATE: 04/09/08	DRAWN BY: BMP	TASK NUMBER: 2	PROJECT NUMBER: TWA 01-2200-2570	FIGURE 2

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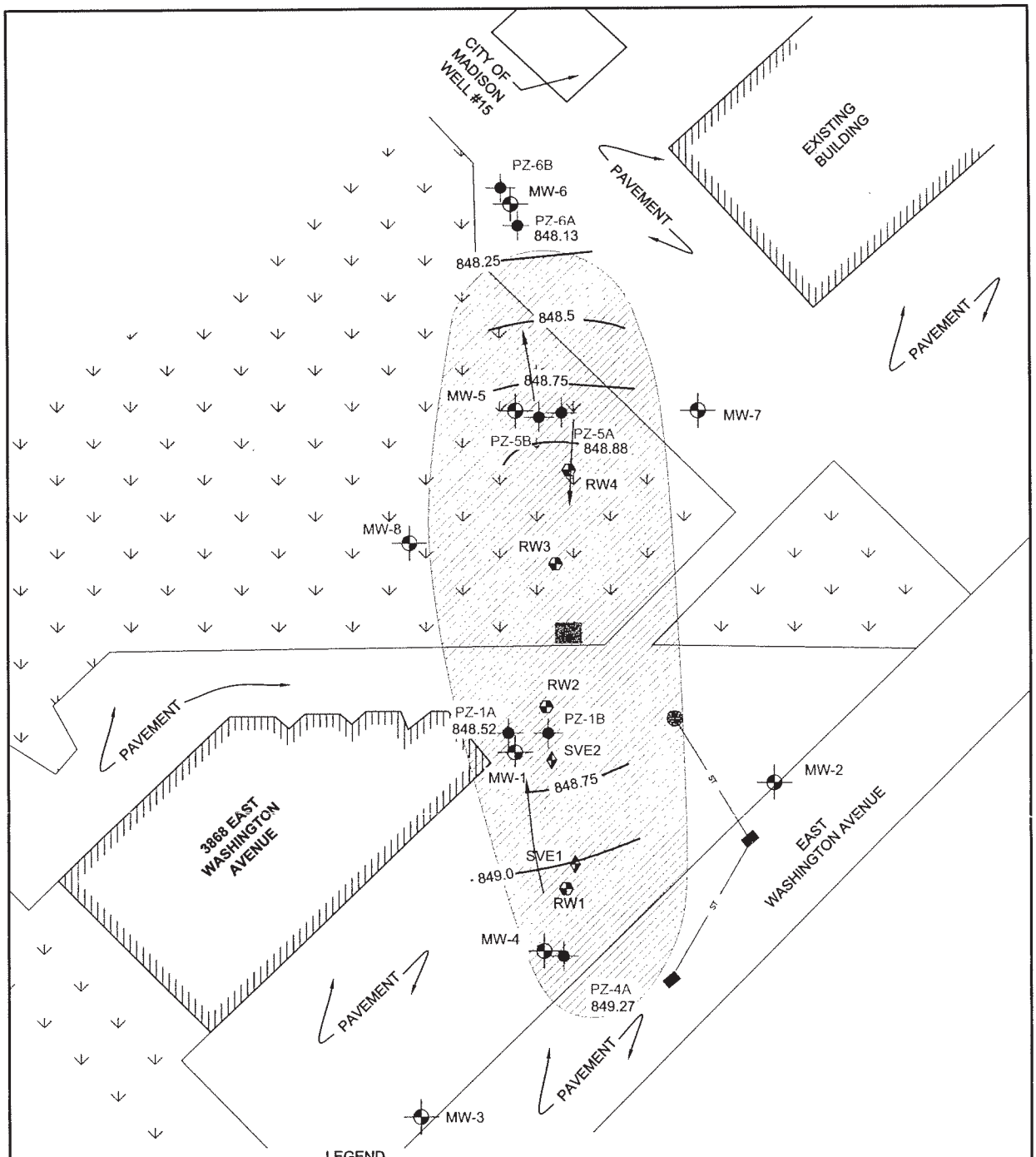

LEGEND

- RW3 — RECOVERY WELL
- SVE2 — VAPOR EXTRACTION WELL
- GRASS
- REMEDIATION BUILDING
- STORM SEWER INLET
- MUNICIPAL STORM SEWER INLET
- ST — STORM SEWER
- —847— GROUNDWATER ELEVATION CONTOUR (IN FEET ABOVE MEAN SEA LEVEL)
- GROUNDWATER FLOW DIRECTION
- MW-7 — MONITORING WELL LOCATION AND IDENTIFICATION
- PZ-5A 848.16 — PIEZOMETER LOCATION AND IDENTIFICATION WITH GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- MW-8 — FORMER WELL ABANDONED DURING UTILITY INSTALLATION
- EXTENT OF GROUNDWATER WITHIN THE DEEP UNCONSOLIDATED AQUIFER WITH PVOC CONCENTRATIONS EXCEEDING THEIR RESPECTIVE NR 140 ES

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SCALE IN FEET

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POTENTIOMETRIC SURFACE MAP
OCTOBER 5, 2007

CAPITOL BRITTON STATION, LLC
3868 EAST WASHINGTON AVENUE
MADISON, WISCONSIN

DATE: 04/09/08	DRAWN BY: BMP	TASK NUMBER: 2	PROJECT NUMBER: TWA 01-2200-2570	FIGURE 3

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Table 1 Groundwater Extraction System Pumping Totals, 3868 East Washington Avenue Madison, Wisconsin

Meter Reading Date*	Day System in Operation during Period	Effluent Meter Reading (gal)	Effluent Pump Hour Meter Reading	Effuent Pump Flow Rate (gpm)	Effluent Volume During Period (gal)	Total Effluent Discharge (gal)
08/24/05	0	131,115	-	-	0	0
08/30/05	6	131,870	-	0.09	755	755
09/02/05	3	131,935	-	0.02	65	820
09/09/05	5	142,625	-	1.48	10,690	11,510
09/15/05	6	172,683	-	3.48	30,058	41,568
09/21/05	6	177,930	-	0.61	5,247	46,815
10/05/05	4	180,095	-	0.38	2,165	48,980
10/19/05	12	200,365	-	1.17	20,270	69,250
11/05/05	1	200,864	-	0.35	499	69,749
11/16/05	10	210,643	-	0.68	9,779	79,528
11/23/05	0	210,643	-	0.00	0	79,528
12/09/05	16	249,456	-	1.68	38,813	118,341
12/21/05	0	249,456	-	0.00	0	118,341
01/31/06	0	249,456	-	0.00	0	118,341
02/15/06	10	291,178	-	2.90	41,722	160,063
03/02/06	12	336,590	-	2.63	45,412	205,475
03/07/06	1	339,140	-	1.77	2,550	208,025
04/07/06	15	367,966	-	1.33	28,826	236,851
04/18/06	9	381,069	-	1.01	13,103	249,954
05/05/06	17	381,069	-	0.82	20,000	269,954
06/15/06	41	402,072	-	0.36	21,003	290,957
07/21/06	36	435,000	-	0.64	32,928	323,885
08/09/06	19	438,000	-	0.11	3,000	326,885
09/21/06	43	438,781	-	0.01	781	327,666
11/03/06	43	609,518	-	2.76	170,737	498,403
12/01/06	1	610,149	-	0.44	631	499,034
01/17/07	0	610,149	-	0.00	0	499,034
02/28/07	42	610149**	0	0.66	40,000	539,034
03/15/07	15	-	140	11.0	92,400	631,434
04/03/07	1	-	148	11.0	5,280	636,714
04/27/07	24	-	655	11.0	334,620	971,334
05/23/07	26	-	1279	11.0	411,840	1,383,174
07/13/07	51	-	2480	11.0	792,660	2,175,834
09/17/07	0	-	2480	0.0	0	2,175,834
09/27/07	5	-	2714	11.0	154,440	2,330,274
10/05/07	8	-	2905	21.0	240,660	2,570,934
10/23/07	18	-	3337	21.0	544,320	3,115,254
11/01/07	9	-	3550	12.0	153,360	3,268,614
11/07/07	6	-	3550	0.0	0	3,268,614
11/16/07	9	-	3761	12.0	151,920	3,420,534
11/28/07	12		4050	12.0	208,080	3,628,614
12/04/07	6	-	4196	12.0	105,120	3,733,734
12/09/07	5	-	4315	19.0	135,660	3,869,394
12/18/07	9	-	4531	6.0	77,760	3,947,154
12/19/07	1	-	4531	0.0	0	3,947,154
01/24/08	36	-	5392	12.0	619,920	4,567,074
02/28/08	35	-	6232	10.0	504,000	5,071,074
03/24/08	6	-	6370	10.0	82,800	5,153,874

Total Days in Op	640

Note: Average extraction rate in gallons per day since system began = 5465

* = groundwater extraction system began operation on August 24, 2005

** = effluent flow meter malfunctioned, effluent pump hour meter installed to replace water meter

gal = gallons

Table 2 Groundwater Analytical Results, 3868 East Washington Avenue, Madison, Wisconsin

Well ID	Date Analyzed	Detected Volatile Organic Compounds (micrograms per liter)						
		Benzene	1,2-Dichloro-ethane	Ethylbenzene	Methyl-tertiary-butyl-ether	Toluene	Trimethyl-benzenes	Xylenes
NR 140, Wis. Adm. Code PAL		0.5	0.5	140	12	200	96	1000
NR 140, Wis. Adm. Code ES		5	5	700	60	1000	480	10,000
MW-1	10/20/97	110	-	3.4	<0.21	31	*221*	139
	05/06/99	200	-	2.6	<0.64	25	*202*	60.7
	01/31/01	210	-	4.4	<11	22	73	6.6
	05/01/01	200	-	<0.40	*14*	15	91	<0.40
	09/21/05	643	<12.5	*317*	<18	*362*	*424 "J"*	945
*	09/21/06	619	16	*289*	<3.6	*327*	*407*	886
	09/21/06	234	<7.2	10.4 "J"	<5.2	36	*168*	80
	05/23/07	68	<4.5	27.5	<5.2	74	*306*	385
	10/05/07	126	<4.5	*147*	<5.2	420	*378*	649
	03/25/08	34	-	*60*	<6.2	24.3	45	40.2 "J"
PZ-1A	10/20/97	17,000	-	1900	<29	19,000	560	*6300*
	05/06/99	17,000	-	1500	<32	9800	*427*	*2900*
	01/31/01	18,000	-	1100	<55	2800	*198*	*1480*
	05/01/01	14,000	290	900	<20	1200	*140*	430
	09/21/05	11,300	<125	1390	<180	7370	*390 "J"*	*2330*
	04/18/06	*4.2*	<0.72	0.92	<0.34	<0.59	<1.36	<1.28
	09/21/06	14,100	<144	1650	<104	2460	*380*	*2780*
	05/23/07	13,300	<45	1620	<52	1120	496 "J"	*2670*
	10/05/07	13,600	<45	1500	<52	1050	*392 "J"*	*2040*
	03/25/08	6800	<41	1160	<70	290	*283 "J"*	814 "J"
*	03/25/08	6300	-	500	<62	440	<142	140
PZ-1B	01/31/01	240	-	34	<1.1	28	12	22
	05/01/01	210	-	30	<40	3.6	<0.40	22.1
	09/21/05	192	61	41	<3.6	7.2 "J"	<11.5	<11.7
	04/18/06	<0.17	33	<0.2	<0.34	<0.59	<1.36	<1.28
	09/21/06	1300	102	137	<10.4	<11.8	<31.8	<28.4
	03/25/08	181	15.4	37	<0.7	3.2	7.2	3.65 "J"
MW-2	10/20/97	*3.3 "J"*	-	*600*	<2.1	29	1420	*2960*
	05/06/99	<2.7	-	*440*	<3.2	5.4	1620	*1442*
	01/31/01	210	-	*290*	<55	43	1000	698
	05/01/01	71	-	*200*	*15*	<8.0	1020	434
	09/21/05	<2.6	<2.5	51	<3.6	<5.2	1061	573
	09/21/06	<4.7	<7.2	42	<5.2	<5.9	701	233.7
	03/25/08	5.1 "J"	-	30.2	<6.2	8.2 "J"	*171.4 "J"*	42.0 "J"
MW-3	10/20/97	1200	-	*490*	<4.2	4700	510	*2860*
	05/06/99	11	-	5.1	<0.32	0.67	4.3	3.1
	01/31/01	<0.10	-	<0.10	-	<0.10	<0.20	<0.20
	05/01/01	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	09/21/05	0.43 "J"	<0.25	<0.3	<0.36	1.52 "J"	<1.15	1.82 "J"
	09/21/06	<0.47	<0.72	<0.38	<0.52	<0.59	<1.59	<1.42
	03/25/08	<0.49	-	<0.68	<0.62	<0.46	<1.42	<1.85
MW-4	10/20/97	26,000	-	2600	<42	30,000	2770	13,900
	05/06/99	24,000	-	2100	<64	29,000	3500	14,200
	01/31/01	27,000	-	1800	<1100	29,000	2100	13,700
	05/01/01	24,000	<400	1400	<0.40	28,000	1980	10,600
	09/21/05	29,700	1850	2250	<72	31,900	1964 "J"	11,890
	04/18/06	26,100	1540	2670	<68	30,400	2210	14,300
	09/21/06	27,600	1500	2300	<104	25,900	2050 "J"	12,400
	05/23/07	27,900	1530	2660	<260	28,100	2610 "J"	13,600
	10/05/07	28,300	940	2660	<260	28,400	3060 "J"	13,100
	03/25/08	18,700	860	2500	<350	23,300	2370	12,700
PZ-4A	10/20/97	930	-	*220*	<2.1	1400	*246*	880
	05/06/99	6500	-	*650*	<16	1700	*267*	*1598*
	01/31/01	16,000	-	*610*	<110	4800	*370*	*3870*
	05/01/01	19,000	1100	1300	<40	8000	546	*4660*
	04/18/06	1180	680	12 "J"	<17	*209*	50	516
	09/21/06	14,500	1860	1400	<52	3300	*390*	*4260*
	05/23/07	12,900	1560	990	<52	2550	529 "J"	*3900*
	10/05/07	7100	870	750	<52	1380	*273 "J"*	*1980*
	03/25/08	10,200	1180	1770	<70	4200	786	*5840*
MW-5	05/06/99	540	-	1600	<6.4	2100	1290	*2360*
	01/31/01	280	-	1600	<5.5	3300	1400	*4170*
	05/01/01	240	<20	1400	<40	3000	1090	*3150*
	09/21/05	<1.3	203	3.1 "J"	<1.8	<2.6	<5.75	<5.85
	04/18/06	40	105	251	<1.7	37	62.1	*194.9*

Table 2 Groundwater Analytical Results, 3868 East Washington Avenue, Madison, Wisconsin

Well ID	Date Analyzed	Detected Volatile Organic Compounds (micrograms per liter)						
		Benzene	1,2-Dichloro-ethane	Ethylbenzene	Methyl-tertiary-butyl-ether	Toluene	Trimethyl-benzenes	Xylenes
NR 140, Wis. Adm. Code PAL		0.5	0.5	140	12	200	96	1000
NR 140, Wis. Adm. Code ES		5	5	700	60	1000	480	10,000
MW-5 (con't)	09/21/06	0.58 "J"	**168**	<0.38	<0.52	<0.59	0.41 "J"	<1.42
	05/23/07	**132**	**244**	<3.8	<5.2	<4.6	<15.7	<9.9
	10/05/07	<0.47	**320**	<0.38	<0.52	<0.46	<1.57	<0.99
	03/25/08	<2.4	**229**	<3.5	<7	<3.9	<7.4	<16.7
PZ-5A	05/06/99	**5200**	-	***350***	<16	***260***	49	105
	01/31/01	**6800**	-	***510***	<55	***520***	11	70.4
	05/01/01	**4800**	**620**	***460***	<40	***530***	<40	<40
	09/21/05	**464**	**531**	***187***	<18	72 "J"	<57.5	<58.5
	04/18/06	**77**	**240**	13.4	<1.7	<2.95	<6.8	<6.4
	09/21/06	**7300**	**650**	***470***	<52	**1010**	<159	124
	05/23/07	**8700**	<45	***650***	<52	***930***	<157	<260 "J"
	10/05/07	**7500**	**650**	***460***	<52	***570***	<157	98 "J"
	03/25/08	**5200**	**370**	***490***	<70	***360***	<74	89 "J"
PZ-5B	05/06/99	<0.27	-	<0.32	<0.32	0.35 "J"	0.67 "J"	0.92 "J"
	01/31/01	<0.10	-	<0.10	<1.1	<0.10	<0.20	<0.20
	05/01/01	<0.40	-	<0.40	<0.40	<0.40	<0.40	<0.40
	09/21/05	<0.26	<0.25	<0.3	<0.36	<0.52	<1.15	<1.17
	09/21/06	<0.47	<0.72	<0.38	<0.52	<0.59	<1.59	<1.42
	05/23/07	***0.76 "J"***	<0.45	<0.38	<0.52	<0.46	<1.57	<0.99
	10/05/07	<0.47	<0.45	<0.38	<0.52	<0.46	<1.57	<0.99
	03/25/08	<0.49	-	<0.68	<0.62	<0.46	<1.42	<1.85
MW-6	01/31/01	<0.10	-	<0.10	<1.1	0.2	<0.20	<0.20
	05/01/01	<0.40	-	<0.40	<40	<0.40	<0.40	<0.40
	09/21/05	<0.26	<0.25	<0.3	<0.36	<0.52	<1.15	<1.17
	09/21/06	<0.47	<0.72	<0.38	<0.52	<0.59	<1.59	<1.42
	05/23/07	<0.47	<0.45	<0.38	<0.52	<0.46	<1.57	<0.99
	10/05/07	<0.47	<0.45	<0.38	<0.52	<0.46	<1.57	<0.99
	03/25/08	<0.49	-	<0.68	<0.62	<0.46	<1.42	<1.85
PZ-6A	01/31/01	***3.2***	-	43	<1.1	1.6	1.6	4.04
	05/01/01	***1.8***	-	47	<0.40	<0.40	1.4	1.7
	09/21/05	**8.9**	**360**	0.38 "J"	<0.36	<0.52	0.8 "J"	<1.17
	04/18/06	<0.17	**230**	<0.2	<0.34	<0.59	0.21 "J"	<1.28
	09/21/06	**24.4**	**272**	1.9 "J"	<2.6	3.0 "J"	<7.95	<7.1
	05/23/07	**120**	**196**	8.0 "J"	<5.2	11.6 "J"	<15.7	9.5 "J"
	10/05/07	***1.81***	**330**	0.46 "J"	<0.52	<0.46	1.27 "J"	0.41 "J"
	03/25/08	<0.24	***2.44***	<0.35	<0.7	<0.39	<0.74	<1.67
PZ-6B	01/31/01	***0.53***	-	<0.10	3.1	<0.10	<0.20	<.20
	05/01/01	***0.7***	-	<0.40	4.3	<0.40	<0.40	<0.40
	09/21/05	<0.26	<0.25	<0.3	4	<0.52	<1.15	<1.17
	04/18/06	<0.17	<0.72	<0.2	2.77	<0.59	<1.38	<1.28
	09/21/06	<0.47	<0.72	<0.38	4.0	<0.59	<1.59	<1.42
	05/23/07	<0.47	<0.45	<0.38	0.84 "J"	<0.46	<1.57	<0.99
	10/05/07	<0.47	<0.45	<0.38	<0.52	<0.46	<1.57	<0.99
	03/25/08	<0.24	<0.41	<0.35	<0.7	<0.39	<0.74	<1.67
MW-7	01/31/01	***0.33***	-	<0.10	<1.1	0.38	<0.20	0.24
	05/01/01	<0.40	-	<0.40	<40	<0.40	<0.40	<0.40
	09/21/05	<0.26	<0.25	<0.3	<0.36	<0.52	<1.15	<1.17
	09/21/06	<0.47	<0.72	<0.38	<0.52	<0.59	<1.59	<1.42
	03/25/08	<0.49	-	<0.68	<0.62	<0.46	<1.42	<1.85
MW-8	01/31/01	<0.10	-	<0.10	<1.1	<0.10	<0.20	<0.20
	05/01/01	<0.40	-	<0.40	<40	<0.40	<0.40	<0.40
RW1	03/25/08	<0.49	-	<0.68	<0.62	<0.46	<1.42	<1.85
RW2	03/25/08	***2.35***	-	1.06 "J"	<0.62	5.2	<1.42	7.7 "J"
RW3	03/25/08	**86**	-	7.9	3.7	4.5	1.72 "J"	12.0
RW4	03/25/08	<0.49	-	0.98 "J"	<0.62	0.66 "J"	1.35 "J"	<1.85

Key:

- = Not analyzed
J = analyte detected between Limit of Detection and Limit of Quantitation
<x = not detected above laboratory Limit of Detection of X

* = duplicate sample

XXX = exceeds Chapter NR 140, Wisconsin Administrative Code (NR 140, Wis. Adm. Code preventive action limit (PAL)

XXX = exceeds NR 140, Wis. Adm. Code enforcement standard (ES)

Table 3 Historical Groundwater Elevation Data, 3868 East Washington Avenue, Madison, Wisconsin

Well ID	Ground Surface Elevation (feet)	Reference Point Elevation * (feet)	Date	Depth to Water (Feet Below Grade)	Water Table Elevation (feet)
MW-1		880.71	03/01/99	35.87	844.84
			06/21/99	33.47	847.24
			01/31/01	35.10	845.61
			05/01/01	34.25	846.46
			06/26/01	33.99	846.72
			09/21/05	33.13	847.58
			04/18/06	33.99	846.72
			09/21/06	32.66	848.05
			05/23/07	31.57	849.14
			10/05/07	31.36	849.35
			03/24/08	30.33	850.38
MW-2		880.54	03/01/99	35.52	845.02
			06/21/99	33.33	847.21
			01/31/01	34.88	845.66
			05/01/01	34.01	846.53
			06/26/01	33.74	846.80
			09/21/05	32.90	847.64
			04/18/06	33.67	846.87
			09/21/06	32.15	848.39
			05/23/07	30.98	849.56
			10/05/07	30.99	849.55
			03/24/08	29.55	850.99
MW-3		878.87	03/01/99	33.98	844.89
			06/21/99	31.61	847.26
			01/31/01	33.05	845.82
			05/01/01	32.28	846.59
			06/26/01	31.98	846.89
			09/21/05	31.12	847.75
			04/18/06	32.21	846.66
			09/21/06	30.53	848.34
			05/23/07	28.39	850.48
			10/05/07	28.58	850.29
			03/24/08	27.92	850.95
MW-4		878.44	03/01/99	33.62	844.82
			06/21/99	31.22	847.22
			01/31/01	32.62	845.82
			05/01/01	31.89	846.55
			06/26/01	31.62	846.82
			09/21/05	30.60	847.84
			04/18/06	31.71	846.73
			09/21/06	30.03	848.41
			05/23/07	28.74	849.70
			10/05/07	28.48	849.96
			03/24/08	27.57	850.87

Table 3 Historical Groundwater Elevation Data, 3868 East Washington Avenue, Madison, Wisconsin

Well ID	Ground Surface Elevation (feet)	Reference Point Elevation * (feet)	Date	Depth to Water (Feet Below Grade)	Water Table Elevation (feet)
MW-5		883.43	03/01/99	38.84	844.59
			06/21/99	36.61	846.82
			01/31/01	38.10	845.33
			05/01/01	37.28	846.15
			06/26/01	36.99	846.44
			09/21/05	36.45	846.98
			04/18/06	37.13	846.30
			09/21/06	36.04	847.39
			05/23/07	34.74	848.69
			10/05/07	34.22	849.21
			03/24/08	33.62	849.81
MW-6		887.12	05/01/01	41.11	846.01
			06/26/01	40.83	846.29
			09/21/05	39.83	847.29
			04/18/06	40.48	846.64
			09/21/06	38.72	848.40
			05/23/07	37.27	849.85
			10/05/07	36.12	851.00
			03/24/08	36.31	850.81
MW-7		884.55	05/01/01	38.37	846.18
			06/26/01	38.17	846.38
			09/21/05	37.27	847.28
			04/18/06	38.31	846.24
			09/21/06	36.80	847.75
			05/23/07	35.82	848.73
			10/05/07	35.22	849.33
			03/24/08	34.61	849.94
MW-8		880.26	05/01/01	33.89	846.37
			06/26/01	33.61	846.65
			09/21/05	Dry	-
			04/18/06	Dry	-
			09/21/06	29.63	850.63
PZ-1A		880.51	03/01/99	35.84	844.67
			06/21/99	33.47	847.04
			01/31/01	35.21	845.30
			05/01/01	34.21	846.30
			06/26/01	33.90	846.61
			09/21/05	33.19	847.32
			04/18/06	34.10	846.41
			09/21/06	32.36	848.15
			05/23/07	31.66	848.85
			10/05/07	31.99	848.52
			03/24/08	30.12	850.39
PZ-1B		877.91	05/01/01	32.45	845.46
			06/26/01	32.28	845.63
			09/21/05	31.57	846.34
			04/18/06	31.75	846.16
			09/21/06	30.68	847.23
			03/24/08	27.96	849.95

Table 3 Historical Groundwater Elevation Data, 3868 East Washington Avenue, Madison, Wisconsin

Well ID	Ground Surface Elevation (feet)	Reference Point Elevation * (feet)	Date	Depth to Water (Feet Below Grade)	Water Table Elevation (feet)
PZ-4A		878.28	03/01/99	33.52	844.76
			06/21/99	31.46	846.82
			01/31/01	32.76	845.52
			05/01/01	32.05	846.23
			06/26/01	31.56	846.72
			09/21/05	Inaccessible	-
			04/18/06	31.58	846.70
			09/21/06	30.12	848.16
			05/23/07	30.13	848.15
			10/05/07	29.01	849.27
			03/24/08	26.11	852.17
PZ-5A		883.34	03/01/99	37.31	846.03
			06/21/99	36.54	846.80
			01/31/01	38.01	845.33
			05/01/01	37.37	845.97
			06/26/01	36.97	846.37
			09/21/05	36.29	847.05
			04/18/06	36.97	846.37
			09/21/06	35.98	847.36
			05/23/07	35.85	847.49
			10/05/07	34.51	848.83
			03/24/08	33.40	849.94
PZ-5B		883.50	03/01/99	40.26	843.24
			06/21/99	38.02	845.48
			01/31/01	39.28	844.22
			05/01/01	38.55	844.95
			06/26/01	38.43	845.07
			09/21/05	38.15	845.35
			04/18/06	37.69	845.81
			09/21/06	37.16	846.34
			05/23/07	34.89	848.61
			10/05/07	35.26	848.24
			03/24/08	34.01	849.49
PZ-6A		886.51	05/01/01	47.78	838.73
			06/26/01	41.68	844.83
			09/21/05	40.85	845.66
			04/18/06	41.85	844.66
			09/21/06	40.48	846.03
			05/23/07	39.27	847.24
			10/05/07	38.38	848.13
			03/24/08	37.24	849.27
PZ-6B		887.20	05/01/01	42.57	844.63
			06/26/01	42.47	844.73
			09/21/05	47.64	839.56
			04/18/06	42.26	844.94
			09/21/06	43.26	843.94
			05/23/07	39.68	847.52
			10/05/07	38.91	848.29
			03/24/08	37.97	849.23

Note: Bench mark is top of PVC casing